**KLARLACK CLEARCOAT**

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

### 1.1. Product identifier

**KLARLACK CLEARCOAT**

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Clearcoat, spray version for professional use in car refinish.

### 1.3. Data of the supplier Safety Data Sheet

**NOVOL Sp. z o.o.**
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Registration numer: 000024104

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**Person responsible for the Safety Data Sheet** dokumentacja@novol.pl

**1.4. Emergency telephone number** +48 61 810-99-09 (from 7.00 to 15.00)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**Classification 1272/2008/EC:**
Aerosols, hazard category 1. Extremely flammable aerosol.
Aerosols, hazard categories 1. Pressurised container: May burst if heated.
Skin irritant, hazard category 2 (Skin Irrit. 2). Causes skin irritation.
Serious eye damage/eye irritation, Hazard Category 1 (Eye Dam. 1). Causes serious eye damage.
Specific target organ toxicity – single exposure, hazard category 3 (STOT SE Cat. 3). May cause drowsiness or dizziness. May cause respiratory irritation
Hazardous to the aquatic environment – chronic hazard, Category 3. Aquatic Chronic 3. Harmful to aquatic life with long lasting effects.

### 2.2. Label elements:

Contains: Dimethyl ether, Butan-1-ol

Pictograms:

Signal word: Danger

| | |
|---|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness. |
| H412 | Harmful to aquatic life with long lasting effects. |
| P102 | Keep out of the reach of children. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P260 | Do not breathe vapours/spray. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/ face protection. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a doctor. |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. |

### 2.3. Other hazards

No available data.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1. Substances**
Not applicable.

**3.2. Mixtures**

**Product identifier** **KLARLACK CLEARCOAT**

| Substance name | Identification numbers | Classification and marking | Concentration [wt%] |
|---|---|---|---|
| Dimethyl ether | EC: 204-065-8<br>CAS: 115-10-6<br>Index no.: 603-019-00-8<br>Registration no.: 01-2119472128-37-XXXX | Flam. Gas. 1; H220;<br>Press. Gas.H280 | 50-<75 |
| Hydrocarbons, C9, arom. | WE: 918-668-5<br>CAS: --<br>Index no.:: --<br>Registration no.: 01-2119455851-35-XXXX | Flam.Llq. 2, H226<br>Asp. Tox. 1; H304<br>Skin Irrit.2; H315<br>Aquatic Chrinic 2, H411<br>STOT SE,H335, H336 | 10-<12.5 |
| Xylene | EC: 215-535-7<br>CAS: 1330-20-7<br>Index no.: 601-022-00-9<br>Registration no.: 01-2119488216-32-XXXX | Flam. Liq. 3; H226;<br>Acute Tox. 4; H332<br>Acute Tox. 4; H312<br>Skin Irrit.2; H315 | 5-<10 |
| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | EC: 921-024-6<br>CAS: --<br>Index no.: --<br>Registration no.: 01-2119475514-35-XXXX | Flam.Llq. 2, H225<br>Asp. Tox. 1; H304<br>Skin Irrit.2; H315<br>Aquatic Chrinic 2, H411<br>STOT SE, H336 | 5-<10 |
| Butan-1-ol | EC: 200-751-6<br>CAS: 71-36-3<br>Index no.: 603-004-00-6<br>Registration no.: 01-2119484630-38-XXXX | Flam. Liq. 3; H226;<br>Acute. Tox.4; H302<br>STOT SE 3, H335, H336<br>Skin Irrit. 2; H315<br>Eye Dam.1; H318 | 5-<10 |
| Ethylbenzene | EC: 202-849-4<br>CAS: 100-41-4<br>Index no.: 601-023-00-4<br>Registration no.: 01-2119489370-35-XXXX | Flam. Liq. 2; H225<br>Acute Tox. 4; H332<br>STOT RE 2; H373 (hearing organs)<br>Acute Tox. 1; H304 | <2,5 |

The full text of the hazard statements (H) is provided in Section 16.

## SECTION 4: FIRST AID MEASURES

**4.1. Description of first aid measures**
General information:
See section 11 of the Safety Data Sheet.

Inhalation:
Take the victim outside into fresh air, ensure quiet surrounding; in case of no breath, apply artificial respiration. Call a doctor.

Skin:
Take off contaminated clothing. Rinse contaminated skin with plenty of lukewarm water for about 15 minutes. If irritation persists, consult a doctor.

## SECTION 4: FIRST AID MEASURES

Eyes:
Rinse immediately with plenty of lukewarm water for about 15 minutes, avoid strong water jet-risk of cornea damage, consult a doctor.

Alimentary tract:
Do not provoke vomiting (choking risk). Rinse mouth with water. If conscious, administer 1-2 glasses of warm water. Call a doctor. Person giving first aid should wear medical gloves.

**4.2. Most important symptoms and effects, both acute and delayed**
Vapours may cause drowsiness and dizziness. Repeated exposure might cause skin dryness or rupture.

**4.3. Indications of any immediate medical attention and special treatment needed**
Special measures allowing for specialist and immediate aid should be available in the place of work.

## SECTION 5: FIREFIGHTING MEASURES

**5.1. Extinguishing media**
Powder, foam resistant to alcohols, carbon dioxide, water mist.

**5.2. Special hazards arising from the substance or mixture**
Fire may cause generation of carbon dioxide and other toxic gases.

**5.3. Advice for firefighters**
Fire-fighting teams should wear self-contained breathing apparatus and light protective clothing. Cool adjacent tanks by spraying water at a safe distance.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures**
For persons not being the members of aid giving staff:
Eliminate sources of ignition. Ensure sufficient ventilation of the room. Avoid direct contact with the released substance. Avoid contact with skin and eyes. Personal protection measures - section 8 of the Safety Data Sheet.

For persons giving aid:
Persons giving aid should wear protective clothing made of coated, impregnated fabric, protective gloves (viton), tight protective glasses and breathing apparatus: gas mask with A type absorber.

**6.2. Environmental precautions**
Prevent leakage to the sewage system, surface waters, underground waters and soil.

**6.3. Methods and materials for containment and cleaning up**
Stop the leakage (close the liquid inflow, seal), place damaged container in an emergency container, remove the liquid mechanically and place it in an emergency container. In case of large leakage, embank the area. In case of small amounts, collect with the use of a binding agent (e.g. mica, diatomaceous earth, sand).

**6.4. Reference to other sections**
Personal protection measures - see section 8 of the Safety Data Sheet.
Disposal considerations - see section 13 of the Safety Data Sheet.

## SECTION 7: HANDLING AND STORAGE OF THE SUBSTANCES AND MIXTURES

**7.1. Precautions for safe handling**
Pressurized container: Do not spray on a naked flame or any incandescent material. Keep away from source of ignition – No smoking. Prevent leakage to the sewage system, surface waters, underground waters and soil. Use in well ventilated rooms. Do not smoke. Do not inhale fumes. Avoid contact with skin and eyes. Take precaution measures against electrostatic discharge. Use personal protection measures - section 8 of the Safety Data Sheet.

**7.2. Conditions for safe storage, including any incompatibilities**
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from source of ignition – No smoking. Keep out of the reach of children Do not store near large amounts of organic peroxides and other strong oxidants. Take precaution measures against electrostatic discharge. Store in cool, well ventilated rooms.

**7.3. Special end use(s)**
For professional use in car refinish taking into consideration the information included in subsections 7.1 and 7.2.

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

**8.1. Control parameters**

Xylene CAS 1330-20-7 according to:

- *TRGS 900:* MAK: 100ppm, MAK: 440 mg/m$^3$, 2(II),DFG, H
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA 50 mg/m$^3$, 220mg/m$^3$, STEL 100ppm, 441 mg/m$^3$, Sk, BMGV

Dimethyl ether CAS 115-10-6 according to:

- *TRGS 900:* MAK: 1000ppm, MAK: 1900 mg/m$^3$, 8(II),DFG
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: TWA 400 ppm, 766 mg/m$^3$, STEL 500ppm, 958 mg/m$^3$

Butan-1-ol CAS 71-36-3 according to:

- *TRGS 900:* MAK: 100ppm, MAK: 310 mg/m$^3$, 1(I),DFG, Y
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]: STEL 50ppm, 154 mg/m$^3$,Sk

**8.2. Exposure control**

Respiratory tract protection:
Gas mask with A type absorber (EN 141).

Hand protection:
Protective gloves PN-EN 374-3 (viton, 0.7 mm thick, penetration time > 480 min.)

Eye protection:
Tight protective glasses.

Skin protection:
Proper protective clothing (coated impregnated fabrics).

Workplace:
Fixed fume extraction and general ventilation.

Environmental exposure control:
Prevent leakage to the sewage system, surface waters, underground waters and soil.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties**

| | |
|---|---|
| Physical state | liquid in aerosol |
| Colour | according to specyfication |
| Odour | strong, powerful |
| Odour threshold | no data |
| pH | not applicable |
| Melting/freezing point | not applicable |
| Boiling point | not applicable |
| Flash point | <0°C |
| Autoignition point | not applicable |
| Breakdown point | no data |
| Evaporation rate | not applicable |
| Flammability (solid, gas) | not applicable |
| Explosion limits | % lower: 0.7 vol% upper: 26.2 vol% |
| Vapour pressure | 4000 hPa (20°C) |
| Vapour density (with regard to air) | No data |
| Density | about 0.7 g/cm$^3$ (20°C) |
| Solubility (in water) | poor |
| N-octanol/water division ratio | not applicable |
| Viscosity (rotation rheometer) | not applicable |
| Explosive properties | no data |
| Oxidizing properties | not applicable |

**9.2 Other informations**

No available data.

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity**
The product is not reactive under normal conditions.

**10.2. Chemical stability**
The product remains stable under normal conditions.

**10.3. Possibility of hazardous reactions**
Carbon monoxide and other toxic gases are generated as a result of thermal decomposition.

**10.4. Conditions to be avoided**
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from source of ignition – No smoking. Keep out of the reach of children.

**10.5. Incompatible materials**
Avoid contact with large amounts of organic peroxides, strong acids and bases as well as other strong oxidants.

**10.6. Hazardous decomposition products**
Carbon monoxide and other toxic gases are generated as a result of thermal decomposition.

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects**
No experimental data available on the preparation. Evaluation was performed based on the data on dangerous ingredients included in the preparation.

**a) Acute toxicity**

| | | |
|---|---|---|
| Dimethyl ether | $LC_{50}$ (rat, inhalation) | 308 mg/ $m^3$/4h |
| Xylene | $LD_{50}$ (rat, oral) | 4300 mg/kg |
| | $LC_{50}$ (rabbit, skin) | 2000 mg/kg |
| | $LC_{50}$ (rat, inhalation) | 22.1 mg/ $m^3$/4h |
| Butan-1-ol | $LD_{50}$ (rat, ingestion) | 2292 mg/kg |
| | $LD_{50}$ (rabbit, skin) | 3430 mg/kg |
| | $LC_{50}$ (rat, inhalation) | 17,76 mg/ $m^3$/4h |

**b) Skin corrosion/irritation**
Causes skin irritation.

**c) serious eye damage/irritation**
Causes serious eye damage.

**d) respiratory or skin sensitisation**
The mixture has not been classified as allergenic. No available data confirming the hazard class.

**e) germ cell mutagenicity**
The mixture has not been classified as mutagenic. No available data confirming the hazard class.

**f) carcinogenicity**
The mixture has not been classified as cancerogenic. No available data confirming the hazard class.

**g) reproductive toxicity**
The mixture has not been classified as having any harmful effect on reproduction. No available data confirming the hazard class.

**h) STOT-single exposure**
May cause drowsiness or dizziness. May cause respiratory irritation.

**i) STOT- repeated exposure**
No available data confirming the hazard class.

**j) aspiration hazard**
No available data confirming the hazard class.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure methods:**
Inhalation: May cause irritation.
Skin: Causes skin irritation.
Eyes: Causes serious eye irritation.
If swallowed, the substance may cause irritation of the alimentary tract, nausea, vomiting and diarrhoea.

**Poisoning symptoms:**Headache and vertigo, fatigue, decreased muscle power, drowsiness and, in exceptional instances, loss of consciousness. May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking

## SECTION 12: ECOLOGICAL INFORMATION

No experimental data available on the preparation. Evaluation was performed based on the data on dangerous ingredients included in the preparation.

**12.1. Toxicity**

| | |
|---|---|
| Dimethyl ether | Daphnia magna EC50 (48h) >4000 mg/l |
| Xylene | Daphnia magna EC50 (48hours.) > 7.4 mg/l<br>Evaluation indicator of acute toxicity for mammals: 3; for fish: 4.1<br>Number in the catalogue of water hazardous substances: 206<br>Water hazard class: 2 |
| Butan-1-ol | Daphnia magna /EC50 (48h) 1328 mg/l |
| **12.2. Persistence and degradability** | No available data. |
| **12.3. Bioaccumulative potential** | No available data. |

**12.4. Mobility in soil**
Product very poorly soluble in water.

**12.5. Results of PBT and vPvB assessment**
No available data.

**12.6. Other adverse effects**
Harmful to aquatic life with long lasting effects.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**
The product must be disposed of in compliance with proper local and statutory regulations with regard to waste - see point 15.
The product should be disposed with entities which are authorised to conduct activity in the area of collecting, recycling or utilization of waste.

Product remains:
Do not dispose the product into the sewage system. Do not store with communal waste. Remove the remains of the mixture carefully and leave to dry only in good ventilated rooms. The dried product is not harmful waste.
**CAUTION:** The remains should be dried in small portions. Keep them away from flammable products. High amounts of heat are released during chemical reaction!

Contaminated container:
A container containing unhardened remains of the product is harmful waste. Do not store with communal waste. The contaminated container should be disposed with entities which are authorized to collection, recover or disposal.

## SECTION 14: TRANSPORT INFORMATION

| | | ADR/RID | IMO/IMGD | IATA-DGR |
|---|---|---|---|---|
| **14.1.** | **UN number** | 1950 | 1950 | 1950 |
| **14.2.** | **UN proper shipping name** | | AEROSOLS, flammable | |
| **14.3.** | **Transport hazard class(es)** | 2 | 2 | 2 |
| **14.4.** | **Packaging group** | -- | -- | -- |
| **14.5.** | **Environmental hazards** | -- | -- | -- |

**14.6. Special precautions for user**
Do not transport together with materials of class 1 (excluding materials of class 1.4S) and some materials of classes 4.1 and 5.2. During transport, avoid direct contact with materials of classes 5.1 and 5.2. Do not use an open flame and do not smoke.

**14.7. Transport in bulk according to Annex II of MARPOL Convention and the IBC Code**
Not applicable.

## SECTION 15: REGULATORY INFORMATION

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
REACH - Regulation 2006/1907/WE
CLP - Regulation 1272/2008/WE

**15.2. Chemical safety assessment**
Not performed

## SECTION 16: OTHER INFORMATION

**Relevant hazard statements listed in Sections 2 to 15:**
Flam. Liq.2 Flammable liquid. Category 2
H225 Highly flammable liquid and vapour
Flam. Liq.3 Flammable liquid. Category 3
H226 Flammable liquid and vapour
Acute Tox. 4; Acute toxicity. Category 4
H332 Harmful if inhaled
H312 Harmful in contact with skin
Skin Irrit. 2 Corrosive/irritating effect on skin. Category 2
H315 Causes skin irritation
Asp. Tox. 1 Aspiration toxicity. Category 1
H304 May be fatal if swallowed and enters airways
Aquatic Chronic 2 Hazardous to the aquatic environment. Category 2
H411 Toxic to aquatic life with long lasting effects
H412 Harmful to aquatic life with long lasting effects
STOT SE 3 Specific target organ toxicity – single exposure, category 3
H336 May cause drowsiness or dizziness
H335 May cause respiratory irritation
Acute Tox. 4; Acute toxicity. Category 4
H302 Harmful if swallowed
Eye Dam. 1 Serious eye damage/eye irritation Category 1
H318 Causes serious eye damage
Flam. Gas. 1 Flammable gas. Category 1
H220 Extremely flammable gas
Press. Gas Pressurized gas
H280 Contains gas under pressure; may explode if heated
STOT RE 1 Specific target organ toxicity – repeated exposure, Category 1
H372 Causes damage to organs through prolonged or repeated exposure

## SECTION 16: OTHER INFORMATION

**Explanation of the abbreviations and acronyms used in the Safety Data Sheet**
**CAS no** – numerical symbol ascribed to a chemical substance by the American organization, Chemical Abstracts Service (CAS).
**EC no.** – a number ascribed to a chemical substance in the European List of Notified Chemical Substances (ELINCS) or a number in the European Inventory of Existing Chemical Substances mention in "No-longer polymers" publication (EINECS)
**MPC** – maximum permissible concentration of health hazardous substances in the work place
**MPIC** – maximum permissible instantaneous concentration
**MPCC -** maximum permissible ceiling concentration
**PCB -** permissible concentration in biological material
**UN number -** four-digit identification number of a substance, preparation or product pursuant to UN model regulations
**ADR** – European agreement on international road transport of hazardous materials
**IMO** – International Marine Organization
**RID** – Regulations for international rail transport of hazardous materials
**IMDG-Code** – International marine code for hazardous materials
**ICAO /IATA** – Technical Instructions for Safe Air Transport of Hazardous Materials

The information is based on our current knowledge. This document shall not constitute warranty for product characteristics. Classification was made by calculation method according to the classification rules contained in Regulation 1272/2008/WE.

**Other sources of information**
**ECHA** European Chemicals Agency
**TOXNET** Toxicology Data Network
**IUCLID** International Uniform Chemical Information Database

Changes: General update

Trainings:
With regard to handling, health and safety while working with hazardous substances and mixtures.
With regard to transport of hazardous goods pursuant to the requirements of ADR regulations.

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